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U.S. Trade Deficit and the Impact of Rising Oil Prices

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Summary

Petroleum prices have risen sharply since early 2004. At the same time the average amount of imports of energy-related petroleum products has fallen slightly. The combination of sharply rising prices and a slightly lower level of imports of energy-related petroleum products translates into an escalating cost for those imports. This rising cost added an estimated $70 billion to the nation's trade deficit in 2005 and could add about $100 billion in 2006, depending on how sustainable is the rate of recent price increases. This report provides an estimate of the initial impact of the rising oil prices on the nation's merchandise trade deficit. This report will be updated as warranted by events.

Background

According to data published by the Census Bureau of the Department of Commerce,[1] the prices of petroleum products over the past year have risen considerably faster than the change in demand for those products. As a result, the price increases of imported energy-related petroleum products worsened the U.S. trade deficit in 2005 and likely will do so again in 2006. Energy-related petroleum products is a term used by the Census Bureau and includes crude oil, petroleum preparations, and liquefied propane and butane gas. Crude oil comprises the largest share by far within this broad category of energy-related imports. The increase in the trade deficit is expected to have a slightly negative impact on U.S. gross domestic product (GDP) and could place further downward pressure on the dollar against a broad range of other currencies. To the extent that the additions to the merchandise trade deficit are returned to the U.S. economy as payment for additional U.S. exports or to acquire such assets as securities or U.S. businesses, some of the negative effects could be mitigated.

[1] Census Bureau, Department of Commerce. Report FT900, *U.S. International Trade in Goods and Services,* May 12, 2006. Table 17. The report and supporting tables are available at [http://www.census.gov/foreign-trade/Press-Release/current_press_release/ftdpress.pdf].

Table 1 presents summary data from the Census Bureau for the change in the volume, or quantity, of energy-related petroleum imports and the change in the price, or the value, of those imports for 2005 and for 2006. The data indicate that the United States imported 5.0 billion barrels of total energy-related petroleum products in 2005, valued at $243 billion. In January through March 2006, the quantity of imports decreased slightly form the same period in 2005, for a decrease in the volume of total energy-related petroleum products imports of 2.8%. As **Figure 1** shows, imports of energy-related petroleum products can vary sharply on a monthly basis, but averaged about 417 barrels a month in 2005.

Table 1. Summary Data of U.S. Imports of Energy-Related Petroleum Products, Including Oil (not seasonally adjusted)

	January through March					
	2005		2006			
	Quantity (thousands of barrels)	Value (thousands of dollars)	Quantity (thousands of barrels)	Percent change 2005 to 2006	Value (thousands of dollars)	Percent change 2005 to 2006
Total energy-related Petroleum Products	1,226,459	$48,129,352	1,192,492	-2.8%	$64,835,087	34.7%
Crude oil	945,710	$35,762,639	906,323	-4.2%	$47,690,720	33.4%

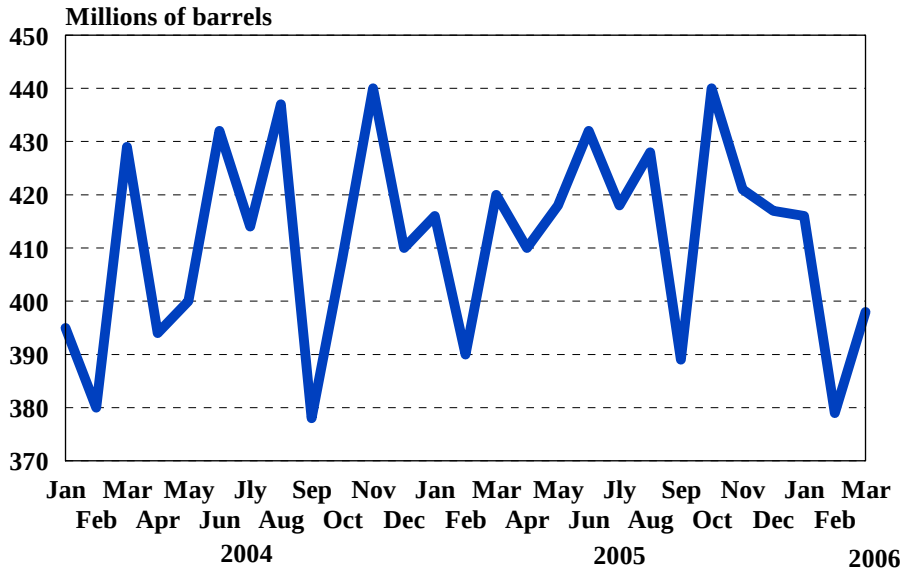
	January through December					
	2005		2006			
	(Actual values)		(Estimated values)			
	Quantity (thousands of barrels)	Value (thousands of dollars)	Quantity (thousands of barrels)	Percent change 2004 to 2005	Value (thousands of dollars)	Percent change 2004 to 2005
Total energy-related Petroleum Products	5,000,235	$243,181,966	4,927,725	-1.5%	$349,108,588	43.6%
Crude oil	3,753,088	$175,563,018	3,596,316	-4.2%	$246,312,636	40.3%

Source: Census Bureau, Department of Commerce. Report FT900, *U.S. International Trade in Goods and Services*, May, 12, 2006. Table 17.
Note: Estimates for January through December of 2006 were developed by CRS from data through the first three months of 2006 and data through 2005 published by the Census Bureau using a straight line extrapolation.

In value terms, energy-related imports rose from over $48 billion in January-March 2005 to $65 billion in the same period in 2006, or an increase of 34.7%. If the rate of price increases experienced through March 2006 hold for the year, the value of U.S. energy-related imports could rise to $350 billion in 2006, or more than $100 billion more than in 2005. **As Figure 2** shows, the cost of U.S. imports of energy-related petroleum products has risen from about $11.5 billion per month in early 2004 to about $22 billion a month in March 2006, down from a record $26 billion a month in October 2005. Based on the data for 2005, the increase in the price of imports of total energy-related petroleum

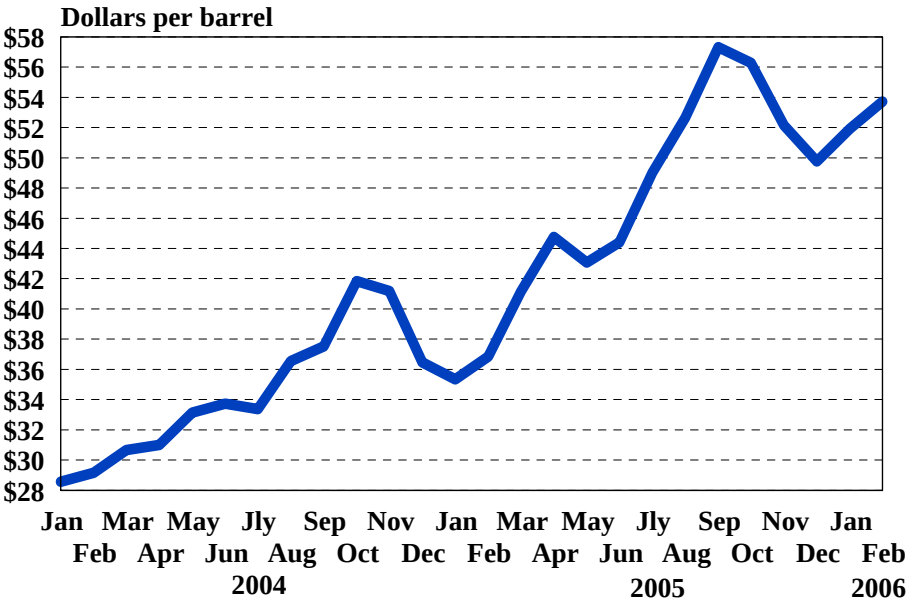
products added $70 billion to the annual U.S. trade deficit. An estimate for 2006 indicates that an increase in the quantity of imports at the current rate and if oil import prices hold in the range of $65 per barrel throughout 2006, the U.S. trade deficit in energy trade could rise by more than $100 billion to reach over $350 billion. This estimate could be higher if oil prices fluctuate higher during the year, as they did in 2005.

Figure 1. Quantity of U.S. Imports of Energy-Related Petroleum Products



Source: Department of Commerce

Figure 2. U.S. Import Price Per Barrel of Crude Oil



Source: Department of Commerce

At an average price of $50 per barrel in December 2005, oil prices had moderated slightly from the average price of $57 per barrel reached in September 2005, as indicated in **Table 2**. As a result of this sharp rise in the value of energy-related imports in 2005, such imports now account for one-third of the total value of the U.S. trade deficit, up from one-fifth in less than two years, but still account for less than the average share during much of the 1990s, when such imports at times accounted for half of the overall U.S. trade deficit.

Table 2. U.S. Imports of Energy-Related Petroleum Products, Including Crude Oil (not seasonally adjusted)

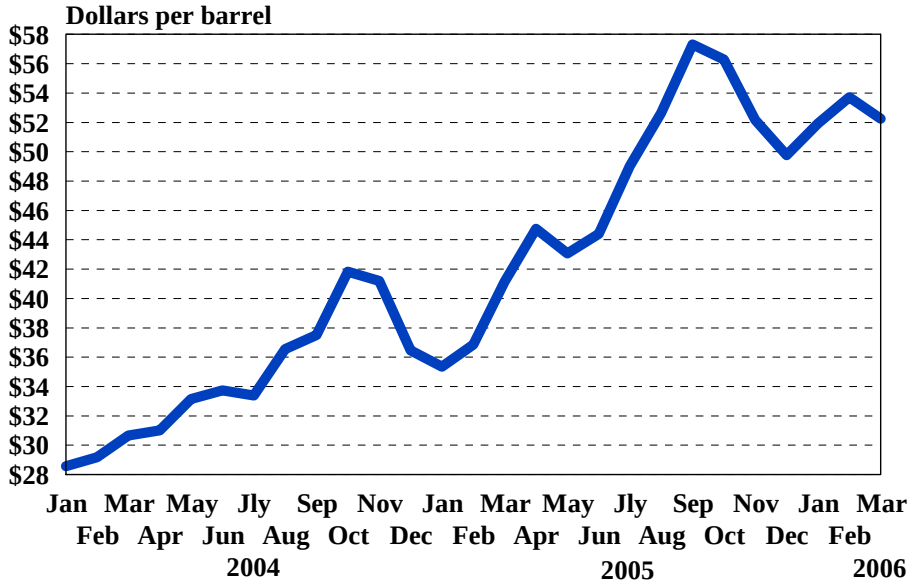
Period	Total energy-related petroleum products [a]		Crude oil			
	Quantity (thousands of barrels)	Value (thousands of dollars)	Quantity (thousands of barrels)	Thousands of barrels per day (average)	Value (thousands of dollars)	Unit price (dollars)
2004						
Jan.- Dec.	4,917,591	$174,499,173	3,820,979	10,440	$131,742,664	$34.48
October	408,187	17,557,812	313,249	10,105	13,107,077	41.84
November	439,794	17,892,337	329,660	10,989	13,577,287	41.19
December	410,406	15,280,713	320,586	10,341	11,689,111	36.46
2005						
Jan-Dec.	5,000,235	243,181,966	3,753,088	10,282	175,563,018	46.78
Jan.-Mar.	1,226,459	48,129,352	945,710	10,508	35,762,639	37.82
January	416,368	15,226,958	322,803	10,413	11,410,258	35.35
February	389,832	14,947,342	296,929	10,605	10,942,242	36.85
March	420,260	17,955,052	325,979	10,515	13,410,140	41.14
April	410,265	18,941,511	313,811	10,460	14,044,645	44.76
May	418,308	18,608,834	318,630	10,278	13,726,092	43.08
June	432,053	19,928,053	328,321	10,944	14,577,503	44.40
July	417,911	20,968,576	312,022	10,065	15,297,700	49.03
August	428,305	23,181,368	325,814	10,510	17,155,252	52.65
September	388,809	23,176,557	278,453	9,282	15,961,823	57.32
October	440,383	26,161,721	304,482	9,822	17,139,812	56.29
November	421,086	22,714,175	314,361	10,479	16,396,855	52.16
December	416,656	21,374,818	311,484	10,048	15.500,697	49.76
2006						
Jan. - Mar.	1,192,492	64,835,087	906,323	10,070	47,690,720	52.62
January	415,788	22,579,751	302,812	9,768	15,724,715	51.93
February	378,721	20,738,047	291,032	10,394	15,635,550	53.72
March	397,983	21,517,289	312,479	10,080	16,330,455	52.26

Source: Census Bureau, Department of Commerce. Report FT900, *U.S. International Transactions in Goods and Services.* May 12, 2006. Table 17.
Note: Energy-related petroleum products is a term used by the Census Bureau and includes crude oil, petroleum preparations, and liquefied propane and butane gas.

Due to the variability in oil prices, it is not possible to provide a precise estimate of the annual merchandise trade deficit for 2006 that will arise as a result of the increase in oil prices, but it is reasonable to assume that the trade deficit in 2006 could rise by about $100 billion, an amount equivalent to an increase of at least 10% in the merchandise trade deficit due to higher oil prices. In terms of the U.S. economy, the estimated rise in the trade deficit from the increase in oil prices in 2005 is equivalent to about one-half of a percentage point of U.S. nominal GDP. In a letter to Congress' Joint Economic Committee, Federal Reserve Board Chairman Alan Greenspan estimated that higher energy prices since the end of 2003 have lowered U.S. GDP by three-fourths of a percentage point in 2005 after having reduced growth by about one-half a point in 2004.[2]

Crude oil comprises the largest share of energy-related petroleum products imports. According to Census Bureau data[3] as shown in **Table 2**, imports of crude oil fell from an average of 10.4 million barrels of crude oil imports per day in 2004 to an average of 10.3 million barrels per day in 2005 period, or a decrease of 1.5 %. In March 2006, such imports were 10.1 million barrels per day, or a decline of 4% from the volume of such imports recorded in March 2005. From 2004 to 2005, the average price of crude oil increased from $34.48 per barrel in 2004 to $46.78 per barrel in 2005 for an increase of 33%. As a result, the value of U.S. energy-related imports rose from about $11.6 billion a month in January 2004 to about $21 billion a month in December 2005, as shown in **Figure 3**. In March 2006, oil prices resumed the rise experienced throughout much of 2005 and rose to over $52 per barrel, or an increase of 27% over the price of oil in March 2005.

Figure 3. U.S. Import Price Per Barrel of Crude Oil



Source: Department of Commerce

[2] Aversa, Jeannine, "Oil Prices Said to Slow U.S. Economy a Bit." *The Washington Post*, July 18, 2005.

[3] Report FT900, *U.S. International Trade in Goods and Services*, May 12, 2006. Table 17.

Issues for Congress

The rise in prices of energy imports experienced since early 2004 is expected to have a relatively minor impact on the rate of economic growth in 2005, but could pose a number of policy issues for Congress. The impact of the rise in energy import prices so far could become more pronounced in 2006 if such prices continue to rise at the rapid rate experienced in the late spring-early summer period of 2005. Most immediately, the higher prices of energy imports will worsen the nation's merchandise trade deficit and have a disproportionate impact on the energy-intensive sectors of the economy and on households on fixed incomes.

Over the long run, a sustained increase in the prices of energy imports will permanently increase the nation's merchandise trade deficit, although some of this impact could be offset if some of the dollars are returned to the U.S. economy through increased purchases of U.S. goods and services or through purchases of such other assets as securities or U.S. businesses. Also, over the long-run it is possible for the economy to adjust to the higher prices of energy imports by improving its energy efficiency, finding alternative sources of energy, or searching out additional supplies of energy.

For Congress, the increase in the nation's merchandise trade deficit could add to existing pressures to examine the causes of the deficit and to address the underlying factors that are generating that deficit. In addition, the rise in prices of energy imports could add to concerns about the nation's reliance on foreign supplies for energy imports and add impetus to examining the nation's energy strategy. The increased outflow of dollars may well add to public and Congressional concerns about foreign acquisitions of U.S. firms and to concerns about the growing share of outstanding U.S. Treasury securities that are owned by foreigners. While the rise in energy prices can be expected to lead eventually to improvements in energy efficiency and to alternative sources of energy, there may well be increased pressure applied to Congress to assist in this process.